

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN

(Other forms may be used in lieu of MR 2, provided they contain the same information)

1. Name of Applicant or Company A.L. Hatch
2. Proposed type of operation Gilsonite Mining
3. (a) Prior Land Use(s) Grazing  
(b) Current Land Use(s) \_\_\_\_\_  
(c) Possible or Prospective Future Land Use(s) Oil & Gas
4. What vegetation exists on the land proposed to be affected Sagebrush,  
cactus.  
(a) Types and Estimated Percent cover or density: 60 per cent
5. What is the pH range of soil before mining? \_\_\_\_\_ pH  
Name of Person or Agency and method of determining pH \_\_\_\_\_
6. Site elevation above sea level 5170 ft.
7. In case of coal, oil shale, and bituminous sandstone:  
Principal seam(s) and thickness(es) \_\_\_\_\_
8. Estimated duration of mining operations Unknown.
9. Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (x) No  
Does the above material being moved have any other characteristics affecting revegetation? No
10. Will any underground workings or aquifers be encountered? ( ) Yes (x) No  
Describe \_\_\_\_\_  
Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (x) No If yes, describe the quality of water being discharged. \_\_\_\_\_



\*DIVISION SUGGESTIONS TO PLAN

Date \_\_\_\_\_

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they contain the same information)

1. Name of Applicant or Company \_\_\_\_\_
2. Proposed type of operation \_\_\_\_\_
3. (a) Prior Land Use(s) Grazing, mining  
(b) Current Land Use(s) Grazing  
(c) Possible or Prospective Future Land Use(s) Grazing, Mining
4. What vegetation exists on the land proposed to be affected Shadscale  
greasewood, rabbitbrush, galleta grass  
(a) Types and Estimated Percent cover or density: 25% cover
5. What is the range pH of soil before mining? 7-8 pH  
Name of Person or Agency and method of determining pH Utah Division of  
Oil, Gas, and Mining
6. Site elevation above sea level 5170
7. In case of coal, oil shale, and bituminous sandstone:  
Principal seam(s) and thickness(es) Not Applicable
8. Estimated duration of mining operations \_\_\_\_\_
9. Has overburden, waste or rejected materials been classified as acid or  
alkali producing? ( ) Yes ( ) No  
Does the above material being moved have any other characteristics  
affecting revegetation? \_\_\_\_\_
10. Will any underground workings or aquifers be encountered? ( ) Yes ( ) No  
Describe \_\_\_\_\_  
Is there an active discharge of water from abandoned deep mines on or  
crossing the land affected? ( ) Yes ( ) No If yes, describe  
the quality of water being discharged. \_\_\_\_\_



11. Describe specifically a detailed procedure for: Describe on Attachment

- (a) The mining sequence
- (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
- (c) The procedure for site preparation including removing trees and brush.
- (d) The method for removing and stockpiling topsoil or disturbed materials.
- (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic material.
- (f) A procedure for final stabilization of disturbed materials.

GRADING AND REGRADING

Specifically describe: SEE Attachment

- (a) Typical cross-section of regrading.
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

TESTING

1. Describe method for testing stability of reclamation fill material.

Local experience will be the guide to stability

Describe method for the testing of soil that is intended to support vegetation Standard nutrient tests for N,P,&K

2. Describe any soil treatment employed as an aid to revegetation

Fertilization and scarification, if needed.

3. Describe surface preparation of areas intended to support vegetation:

Mulching, if needed.

REVEGETATION

1. Revegetation to be completed by:

( ) Operator	( ) Hydroseeding
( ) Soil Conservation District	( ) Aerial Seeding
( ) Private Contractor	( ) Conventional or Rangeland Drilling
Name _____	( ) Other (specify) _____
( ) Other (specify) _____	

2. Will Mulch be used?

Type \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.



3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Fairway crested wheat	4	All Areas	All	Late Fall
Fourwing Saltbush	1	" "	"	" "
Russian wildrye	2	" "	"	" "
Indian Ricegrass	1	" "	"	" "

4. Will affected area be subject to livestock or wildlife grazing? (X) Yes  
( ) No Will vegetation protection be needed? No, grazing is  
very limited.

5. Will irrigation be used? ( ) Yes (XX) No Type \_\_\_\_\_

6. Describe maintenance procedures for revegetation if needed, until surety  
release is granted. Replanting in case of crop failure.

I, the undersigned Operator, hereby submit this to be my  
Reclamation and Mining Plan for the area shown on the attached map. I  
further understand that the operation will be conducted in accordance  
with the Mined Land Reclamation Act of 1975, and all rules and regulations  
currently in effect thereunder.

Signed \_\_\_\_\_ Operator Date \_\_\_\_\_

Taken, subscribed and sworn to before me the undersigned authority  
in my said county, this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_.

Notary Public \_\_\_\_\_

My Commission Expires: \_\_\_\_\_





611

612

613

40'

614

BLACK RIDGE

UTAH AND OURAY INDIAN



1. Extraneous debris, wood, metal, etc., will be removed from area.
2. Shafts will be sealed with one foot of reinforced concrete.
3. Muck and waste dumps will be graded to surface contour.
4. Six inches of top soil will be placed over dump area.
5. All disturbed areas will be reseeded with crested wheat at the rate of 2 lbs. per acre using drill.

#### AFTER OPERATIONS

- A. Underground mining will be conducted in a safe, orderly and miner like fashion.
- B. Existing roads will be used without maintenance.
- C. Old dumps will be leveled. Wooden collars removed. All debris cleaned up and hauled away.
- D. Drainage ditches will be maintained in the event of water.



2. Will Mulch be used? ( ) Yes (x) No

Type: \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
<i>Crested wheat</i>	<i>2lbs.</i>	<i>Roads, mining area.</i>		<i>In fall</i>

4. Will affected area be subject to livestock or wildlife grazing?

( ) Yes (x) No Will vegetation protection be needed? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

5. Will irrigation be used: ( ) Yes (x) No Type \_\_\_\_\_

6. Describe maintenance procedures for revegetation if needed, until surety release is granted.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_